

NASA Stakeholders' Summit
September 13 – 15, 2010
Marriott Westfields Conference Center
Chantilly, VA

Wrap Up

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Day One

The NASA Education Stakeholders' Summit began with the One Stop Shopping Initiative (OSSI) Collaboration Workshop and Luncheon. Dr. Mabel J. Matthews, Manager, Higher Education Program gave the welcome and presided over the session. She provided a historical review of the origin of OSSI and recognized the outstanding work of the OSSI team. She introduced the NASA Collaboration Panel, which included James Stofan, Acting Associate Administrator for Education; Toni Dawsey, Assistant Administrator for Human Capital Management; and Alan Ladwig, Deputy Associate Administrator, Office of Communications. They all brought great experiences, valuable perspectives, and relevant information to the session. Their theme was on Synergy: "The condition that exists when the organization's parts interact to produce a joint effect that is greater than the sum of the parts acting alone." After the remarks from panelists, Carrie Billy, OSSI Broker-Facilitator Corps, American Indian Higher Education Consortium (AIHEC) facilitated table talk sessions, which continued through lunch.

Concurrent Pre-Summit Workshops

Leo Geiger, NASA Headquarters and Deborah Sharpe, NASA Goddard Space Flight Center conducted the sessions on "Introduction to OSSI: LaunchPad and SOLAR System Demonstration and Training, which provided a hands-on orientation of the system. Dr. Vivian Williamson Whitney, Ohio Aerospace Institute; Fatima Senghore, NASA Headquarters; and Dr. Jennifer Giancola Carney, ABT Associates conducted the sessions on "OSSI Evaluation Strategy," which discussed the importance of the performance measurements process. Jeffrey Vargas, Chief Learning Officer, National Nuclear Security Administration conducted the session on "Managing Across Generations," which reiterated the need to identify and implement creative and innovative ways that promote a productive workforce, which includes four generations of workers.

Opening Plenary Session and Reception

James Stofan, Acting Associate Administrator for Education served as the facilitator of the Opening Plenary. He introduced the three keynote speakers: Charles F. Bolden, Jr., NASA Administrator; Dr. Cora Marrett, Acting Director, National Science Foundation; and Michael Lach, Special Assistant for STEM Education, U.S. Department of Education.

Each speaker focused on STEM Education and how it is impacting the U.S. Workforce. They reiterated the importance of collaboration among stakeholders and stressed the importance of diversity and inclusion of ALL in building the STEM pipeline. They stressed the importance of scholarship, internship, and fellowship opportunities in building the STEM workforce and provided National, International, and Agency perspectives on STEM Education. They agreed on the importance of having an innovative tool, such as OSSI and stressed how it might be useful across other Federal Agencies.

After the keynote speakers, stakeholder greetings were given by Marion C. Blakey, President and CEO, Aerospace Industries Association; Dr. William Kelly, Manager, Public Affairs, American Society for Engineering Education; and Leland Melvin, Education Design Team Co-Chair and NASA Astronaut. They provided personal STEM stories and stressed the importance of innovation and creativity, as well as collaborations and partnerships in supporting the workforce of tomorrow.

The NASA Student Ambassadors Panel was the highlight of the evening. They were all very passionate about STEM and were highly motivated and inspiring, as they told their personal STEM stories. They are excellent advocates and role models for NASA.

Biographies of the students who participated on this NASA Student Ambassadors Panel are provided below. For more information on the NASA Student Ambassadors Virtual Community, visit <http://intern.nasa.gov>.



Kareen Borders
University of Washington

Kareen Borders is a doctoral student at the University of Washington pursuing a doctorate in Educational Leadership with a focus on Science, Technology, Engineering and Math (STEM) Education reform. She teaches science and aerospace in the Peninsula School District. In addition to being a Spitzer Space Telescope Teacher and WISE Telescope Teacher Ambassador, Kareen is the team lead for the NASA Explorer School Team at Key Peninsula Middle School. For the past six years, her aerospace students have competed in and won student science investigations. She has developed and led workshops for the Peninsula School District, American Institute of Aeronautics and Astronautics, and Arecibo Observatory. Kareen has published abstracts with the American Astronomical Society (AAS). She is the lead National Board facilitator for her district, supporting other teachers in their pursuit of National Board Certification.



Marie Kingbird-Lowry
Leech Lake Tribal College

Marie Kingbird-Lowry is a second-year student at Leech Lake Tribal College in Minnesota, pursuing liberal studies with a STEM emphasis. She was selected by the National Aeronautics and Space Administration (NASA) as one of its 105 best and brightest interns and fellows for the NASA Student Ambassador Program 2010.

Marie is the only student from Minnesota to serve as a NASA Ambassador. NASA managers and mentors nominated the recipients from the hundreds of interns and fellows engaged in research and education opportunities across the agency.

Marie completed a 10-week summer internship with NASA in 2009, partnering with the late Leann Dick on a research project, in which she worked with Leech Lake Heritage sites to determine which of three possible routes would best serve the needs for the Leech Lake tribe to preserve its cultural resources. “I produced maps that would show where heritage sites have been found and surveyed and what areas were in need of survey. I used the ArcMap program to make maps of different soil drainage class and help determine where sites might be located using

bathometric date of the paleo-landscape,” Marie says. Marie and her partner then presented their research at conferences across the country.

As a member of the NASA Student Ambassadors Virtual Community, Marie will interact with the agency while sharing information, making professional connections, and collaborating with peers. The Student Ambassadors will also represent NASA in a variety of venues and help the agency inspire and engage future interns and fellows.

Marie was named to Leech Lake Tribal College's Dean's List for the fall of 2008 and the President's list for spring of 2009 and is a member of AISES. She is working on an internship with the Leech Lake Tribal College to study tree rings to determine if climate changes the growth of trees.

After graduating, Marie says, “I plan to continue my education at a four-year college to study math, computers, and science. My main goal is to achieve a master's degree in mathematics. I love the challenges that I face when working out equations and solving for the unknown when working with mathematics. I feel that we need more Native Americans in the math and science fields. I want to bring my education back to the reservation to help my people meet the challenges of this rapidly changing world,” she says.

Marie says succeeding academically is important to her because she serves as a role model to her five children, including Adriana (12), Alex (8), Jeremy (7), and twins Robert and ReAnn (6) as well as her reservation's youth. Marie plans a career as a teacher or a system analyst. “Going to college for the first time after being out of school for 13 years was hard, but going to school and raising five kids is a challenge in itself.



Heriberto Reynoso
University of Texas at Brownsville

Heriberto is a senior majoring in computer science at the University of Texas at Brownsville. He is a NASA MUST, Google, Lockheed Martin, Northrop Grumman, MillerCoors Science, Proctor & Gamble, Landstar and General Electric scholar. He has completed two exciting summer internships at NASA's Jet Propulsion Laboratory under the Mobility and Robotics Systems Section.

In addition to attending college and fulfilling his dream job at JPL, Reynoso gives his time to community service. Last year, he showcased his

hand-built robots and inspired thousands of students across south Texas in 22 different schools and events.

Reynoso never had a mentor, so he loves mentoring students for competitions and projects. "I learned it the hard way," he says. "I've experienced countless failures, but through determination, ambitious dreams, and passion, even the impossible seems possible."



Katelyn Doran
University of North Carolina, Charlotte

Katelyn Doran is a graduate student in Computer Science at the University of North Carolina, Charlotte and a recipient of a NASA Graduate Student Researcher's Program Fellowship. Doran has spent the summer at NASA Headquarters and Goddard Space Flight Center working to develop the website associated with the One Stop Shop Initiative (OSSI) and to improve the NASA Student Ambassadors Virtual Community.



Geoffrey Wawrzyniak
Purdue University

Geoffrey Wawrzyniak received the degree of Bachelor of Science in Mechanical Engineering from the University of Wisconsin--Madison in May 1999. He then entered the Graduate School at The University of Texas at Austin where he earned a Masters degree in Aerospace Engineering in May of 2001. He was employed at the Jet Propulsion Laboratory in

Pasadena, California, in the Navigation and Mission Design Section until 2005, when he departed to pursue his Ph.D. at Purdue University in West Lafayette, Indiana. While at JPL, he was a navigator for Mars Odyssey, MER, Genesis, and other deep-space missions. His interests include dynamics, guidance, navigation and control, and his Ph.D. research is on the dynamics and control of solar sails in the Earth-Moon system.



Quenton Bonds
University of South Florida

Quenton Bonds was born and raised in Montgomery Alabama. He received the B.S. degree in Mathematics from Alabama State University in Montgomery, Alabama in 2001 and the M.S. degree in Electrical Engineering in 2006 from The University of South Florida (USF) in Tampa Florida. Mr. Bonds is currently a Ph.D. candidate at USF.

Upon graduating with the Ph.D. in 2010, Dr. Bonds will join the Microwave Instruments Branch of the National Aeronautics and Space Administration (NASA) at the Goddard Space Flight Center (GSFC) in Greenbelt, Maryland. As a Ph.D. student,

Mr. Bonds has interned at various NASA centers: NASA AMES 2006, NASA GSFC 2007, and NASA Glenn 2010.

Of his most notable achievements, Mr. Bonds was the recipient of the 2010 IEEE WAMICONN Best Student Poster Award, 2009 NASA Graduate Student Researchers Fellowship, 2009 FEF Carl Crawford Award, 2009 IEEE MTTS Fellowship for Medical Applications, 2008 USF College of Engineering Best Poster Award, 2005 Emerge Best Oral Presentation Award in the Engineering Category, 2006 NASA Harriet Jenkins Predoctoral Fellowship, 2005 McKnight Doctoral Fellowship, and the 2004 NSF Bridge to Doctorate Fellowship, just to name a few.